

REMARKS

This application has been amended in a manner that is believed to place it in condition for allowance at the time of the next Official Action.

Claims 16-27 and 29-36 are pending in the present application. Claims 16-27 have been amended to address the formal matters raised by the Official Action. Claims 30-36 have been added. Support for claims 30-36 may be found in the original claims and in the present specification at page 6, lines 8-24.

In the outstanding Official Action, the United States Patent and Trademark Office requested the complete revision of the abstract. Applicants submit herewith an abstract on a separate sheet. Applicants believe that the abstract has been drafted in a manner so as to satisfy the requirements of 37 CFR §1.72.

The outstanding Official Action also objected to several typographical errors found in the present specification. As suggested by the Examiner, the specification has been amended to correct these errors found at pages 7, 8, and 11. In addition, the last column of the table found on page 11 has been amended to delete "PA" for the abbreviation "PR". As the Examiner is aware, "PR" refers to the radical layer polymerization. A transcription error was made when translating the French text of International Application PCT/FR00/00488,

filed on February 28, 2000. Indeed, the Examiner's attention is respectfully directed to the PCT/FR00/00488 application, wherein the last column recites "PR".

The Official Action also objected to the disclosure because the weight percent concentrations in the composition on page 10, lines 15-19 added up to 105 wt %. However, applicants do not believe that this affects the overall teaching of the present specification and does not require correction.

Claim 22 was objected for misspelling the term "phenolic ethers" and claim 22 has been amended to correct this informality.

Claims 24-28 were objected to for containing several grammatical errors. In particular, the Official Action noted that the claims did not include a period at the end of each sentence. In addition, the Examiner suggested that the word "and" be inserted after the second-to-last listed ingredient. In accordance with the Examiner's suggestions, claims 24-27 have been amended to correct these informalities. As to claim 28, claim 28 has been cancelled.

Applicants would like to thank the Examiner for taking the time and consideration in suggesting as how to overcome these objections.

Claims 21, 22, 23, 28 and 29 were rejected under 35 USC §112, second paragraph, for allegedly being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicants regard as the invention. Applicants believe that the present amendment obviates this rejection.

Claim 21 was rejected for reciting the term "the case of epoxy resins". Claim 21 has been amended so that this term is no longer recited in the claim.

Claim 22 was rejected for reciting an alternative expression in improper Markush form. As suggested by the Examiner, claim 22 has been amended to recite a proper Markush group.

With respect to claim 23, claim 23 was rejected for reciting a broad recitation together with a narrow recitation which fell within the broad recitation. As a result, the Official Action rejected claim 23 as being indefinite. Claim 23 has been amended to delete the narrower statement of the range/limitation. New claim 30 recites the narrower statement of the range/limitation.

As noted above, claim 28 has been cancelled.

Claim 29 was rejected for reciting the "use" of a composition. The Official Action stated that the recitation of a "use" results in an improper definition of a process. Accordingly, claims 29-36 have been added to properly characterize the claim process.

Thus, in view of the above, applicants believe that claims 16-27 and 29-36 are definite to one skilled in the art.

Claims 16-19 and 22 were rejected under 35 USC §102(b) as allegedly being anticipated by HEIMANN et al. in view of evidence given by Hawley's Chemical Dictionary. This rejection is respectfully traversed.

Applicants believe that HEIMANN et al. in view of evidence given by Hawley's Chemical Dictionary fails to anticipate or render obvious the claimed invention. HEIMANN et al. disclose the use of "gels" or "sealants" which are injected in a liquid form. The "gels" and "sealants" take back a solid form, or harden once they are injected. In both cases, a buffer is added, the buffer being intended to prevent corrosion. The buffer is the essence of the HEIMANN et al. invention (see column 9, line 9).

This stands in contrast to the claimed invention. Claims 16-27 are directed to a protective composition for strands of sheathed cables. The protective composition comprises a viscoelastic gel obtained by slow in situ polymerization, after injection at ambient temperature into the sheath surrounding the strands and in the presence of a swelling solvent, of monomeric or pre-polymeric reagents which are identical or different vinyl monomers, polymerizable by free radical technique; or bi-functional or tri-functional compounds of two different types reacting with each other to give bi-dimensional or tri-dimensional polymers; or mixtures thereof.

Claims 29-30 are directed to a method for protecting strands of a sheathed cable, comprising the steps of injecting the claimed protective composition into the sheathed cable.

HEIMANN et al. fail to disclose or suggest a protective composition obtained by slow in situ polymerization, after injection at ambient temperature into a sheath surrounding the strands, of monomeric or polymeric reagents in the presence of a swelling solvent.

As to the present invention, a protective composition is obtained that is in intimate contact with the strands or plural wires of the sheathed cable to prevent corrosion.

Thus, in view of the above, applicants believe that HEIMANN et al. fail to anticipate or render obvious the claimed invention.

Claims 16, 19, 22, 23 and 29 were rejected under 35 USC §102(b) as allegedly being anticipated by CHANG et al. This rejection is respectfully traversed.

CHANG et al. disclose the use of solid, preformed elements made of gels, which are fitted at the ends of cables or at junctions. CHANG et al. do not disclose or suggest injecting in liquid form at ambient temperature a protective composition of the claimed invention into a sheathed cable, and letting the composition polymerize slowly in situ to obtain a viscoelastic gel along the whole length of the cable.

Thus, in view of the above, applicants believe that CHANG et al. fail to anticipate or render obvious the claimed invention.

Claim 17 was rejected under 35 USC §102(b) as allegedly being anticipated by CHANG et al. in view of evidence given by Hawley's Chemical Dictionary. This rejection is respectfully traversed.

As noted above, CHANG et al. relate to solid, preformed elements made of gels, which are fitted at the ends of cables or at junctions. As a result, applicants believe that CHANG et al. fail to anticipate or render obvious the claimed invention. Indeed, applicants do not believe that the evidence given by Hawley's Chemical Dictionary remedies the deficiencies of CHANG et al.

Claim 20 was rejected under 35 USC §103(a) as allegedly being unpatentable over CHANG et al. in view of BECKER et al. This rejection is respectfully traversed.

In imposing the rejection, the Official Action cites to BECKER et al. as teaching that zinc phosphate can be used as an anti-corrosion pigment in a polyurethane coating. However, BECKER et al. fail to disclose or suggest a protective composition for strands of sheathed cables as set forth in the claimed invention. As a result, applicants believe that BECKER et al. fail to remedy the deficiencies of CHANG et al.

Claim 21 was rejected under 35 USC §103(a) as allegedly being unpatentable over HEIMANN et al. in view of ZAID. This rejection is respectfully traversed.

The Official Action states the ZAID teaches an epoxy coating for metallic surfaces that exhibit improved corrosion-resistance due to the addition of amines such as alkoxyated amines. However, ZAID does not disclose or suggest injecting in liquid form at ambient temperature the protective composition of the invention into a sheath of a sheathed cable, or letting the composition to polymerize slowly in situ to obtain a viscoelastic gel along the whole length of the cable. As a result, applicants believe that CHANG et al. in view of ZAID fail to disclose or suggest the claimed invention.

Claim 24 was rejected under 35 USC §103(a) as allegedly being unpatentable over HEIMANN et al. in view of CHANG et al. and KLEIN et al. This rejection is respectfully traversed.

As noted above, HEIMANN et al. nor CHANG et al. disclose or suggest the claimed protective composition or claimed method. While the Official Action cites to KLEIN et al., KLEIN et al. fail to remedy the deficiencies of HEIMANN et al. and CHANG et al. KLEIN et al. relate to diluents which function to prevent branching of resins during the preparation of an amine terminated resin. However, KLEIN et al. do not disclose or suggest a protective composition for the strands of cables as set forth in the claimed invention. As a result, applicants believe

that the proposed combination fails to disclose or suggest the claimed invention.

Claim 25 was rejected under 35 USC §103(a) as allegedly being unpatentable over HEIMANN et al. in view of CHANG et al. and further in view of KLEIN et al. and FEDERICI et al.

As noted above, applicants believe that HEIMANN et al. in view of CHANG et al. and further in view of KLEIN et al. fail to disclose or suggest the claimed invention. As to FEDERICI et al., FEDERICI et al. relate to a two-component adhesive composition including an epoxy resin and a hardener. In particular, the composition can be used to glue together metals and polymeric compound materials with or without a surface treatment. FEDERICI et al. do not disclose or suggest a protective composition for strands of sheathed cables for permanent structures or a method for protecting strands of sheathed cables comprising injecting a protective composition into the sheathed cable. As a result, FEDERICI Et al. cannot remedy the deficiencies of HEIMANN et al. in view of CHANG et al. and further in view of KLEIN et al.

Claim 26 was rejected under 35 USC §103(a) as allegedly being unpatentable over HEIMANN et al. in view of CHANG et al. and further in view of FEDERICI et al. This rejection is respectfully traversed.

As noted above, applicants believe that none of the publications disclose or suggest injecting in liquid form at

ambient temperature the protective composition of the claimed invention of a sheath into a sheathed cable, and allowing the composition to slowly polymerize in situ to obtain a viscoelastic gel along the whole length of the cable.

As a result, applicants believe that the proposed combination of references fails to render obvious the claimed invention.

Claim 27 was rejected under 35 USC §103(a) as allegedly being unpatentable over CHANG et al. and further in view of CONGER et al., OSHIMA et al. and RINDE et al. This rejection is respectfully traversed.

Applicants believe that CONGER et al., OSHIMA et al. and RINDE et al. fail to remedy the deficiencies of CHANG et al. None of the publications disclose or suggest using a protective composition obtained by slow in situ polymerization, after injection at ambient temperature into a sheathed cable. As a result, applicants believe that the rejection fails to render obvious the claimed invention.

As noted above, claim 28 has been cancelled.

As acknowledged by the Official Action, the cited publications do not teach the claimed concentration of monomeric units. Rather, the Official Action takes the position that these concentrations are result-effective variables. However, a particular parameter of a variable must first be recognized as a result-effective variable, i.e., a variable which achieves a

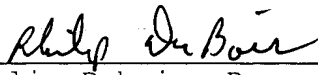
recognized result, before the determination of the parameter of the variable might be characterized as routine or obvious. *In re Antonie*, 559 F2d 618, 195 USPQ 6 (CCPA 1977). However, applicants believe that the Official Action fails to meet its burden in showing that one of ordinary skill in the art would consider the claimed concentration of monomeric units as a result-effective variable. Indeed, the Official Action fails to provide any evidence of this assertion.

In view of the present amendment and the foregoing remarks, therefore, applicants believe that the present application is now in condition for allowance at the time of the next Official action. Allowance and passage to issue on that basis is respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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APPENDIX:

The Appendix includes the following item:

- a new Abstract of the Disclosure